

ANGLE ATTACHMENT FOR POWER TOOL

ABSTRACT OF THE DISCLOSURE

An angle attachment for a hand-held power tool, such as a spiral cutting tool, includes an angle attachment housing having an open first end adapted to be attached to the motor housing of the power tool. An alignment bearing is mounted in the angle attachment housing and adapted to receive and support a first shaft having a first shaft gear mounted thereon. An attachment shaft is mounted in the angle attachment housing at an angle, e.g., a right angle, to the first shaft. The attachment shaft includes an attachment shaft gear mounted thereon which is engaged with the first shaft gear. One or more attachment shaft bearings are mounted in the angle attachment housing to support the attachment shaft for rotational movement thereof. ~~An end of the attachment shaft extends from a second end of the angle attachment housing, and has a structure formed thereon for attaching attachments, such as a cutting wheel or a back-up pad for sanding disks, thereto.~~ The first shaft is coupled to a motor shaft of the power tool before the angle attachment housing is attached to the power tool motor housing. The alignment bearing ensures that the first shaft is properly positioned in the angle attachment housing when the angle attachment housing is attached to the power tool such that the first shaft gear and attachment shaft gear remain engaged. Rotation of the first shaft by the power tool motor causes rotation of attachments attached to the attachment shaft mounted at an angle to the first shaft by means of the gear mechanism formed by the engaged first shaft gear and attachment shaft gear.

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